

TOPS

1. Policy

2. Funding

3. Infrastructure

NASA's Open-Source Science Initiative

\$20M/Year

4. Outreach





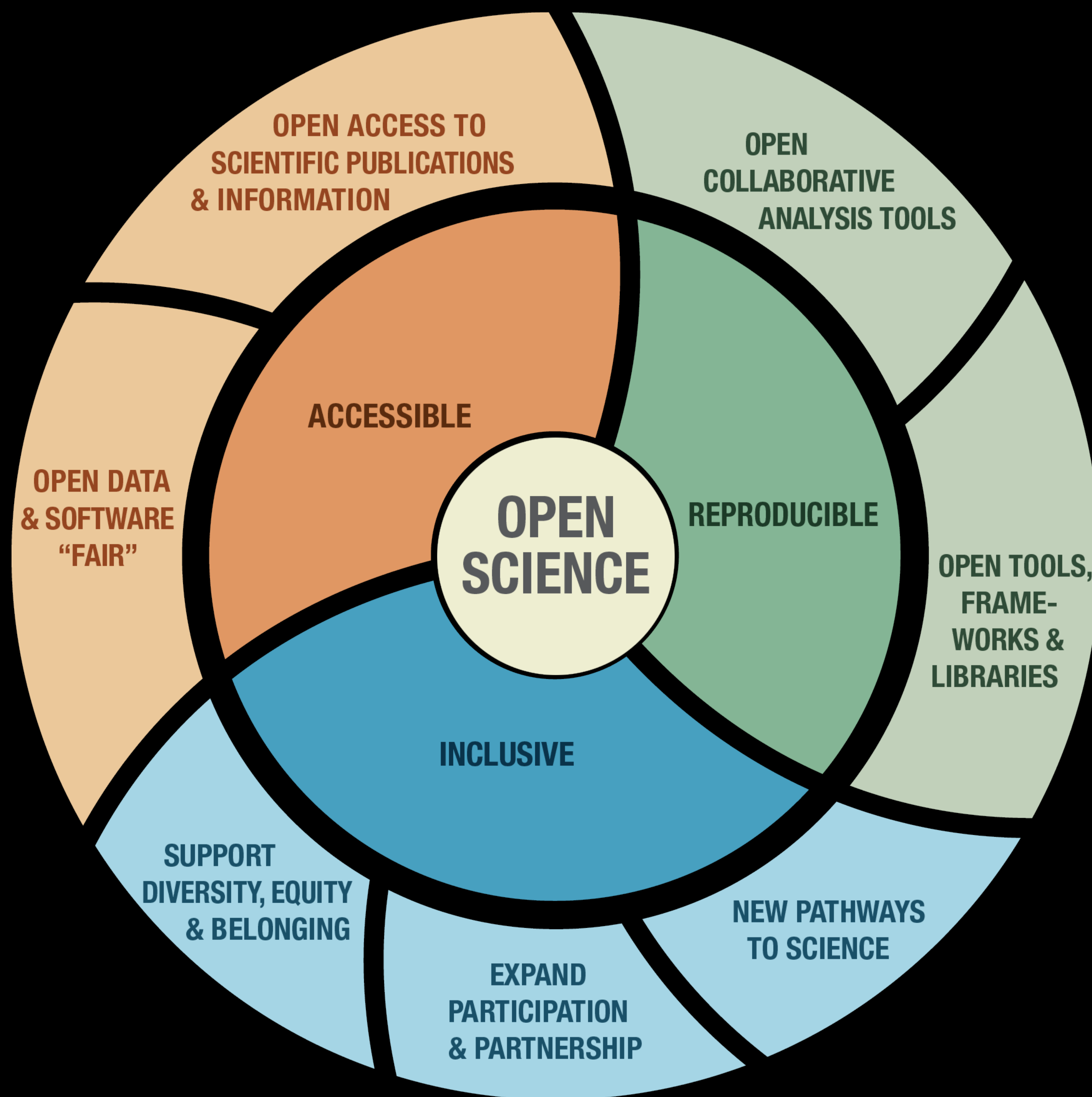
National Aeronautics and
Space Administration



Dr. Chelle Gentemann, Science Lead
Yvonne Ivey, Equity Lead
Cyndi Hall, Community Coordinator
Isabella Martinez, Content Coordinator
Dr. Yaitza Luna-Cruz, CSDO Program Scientist
Dr. Paige Martin, TOPS Program Scientist
Dr. Sam Gabre, ARS, Science Advisor
Dr. Ryan McGranaghan, GSFC, Science Advisor

Kevin Murphy, Chief Science Data Officer SMD
Katie Baynes, Deputy Chief Science Data Officer SMD
Dr. Steve Crawford, Science Data Officer SMD
Amy (Uyen) Truong, Chief Science Data Office Coordinator





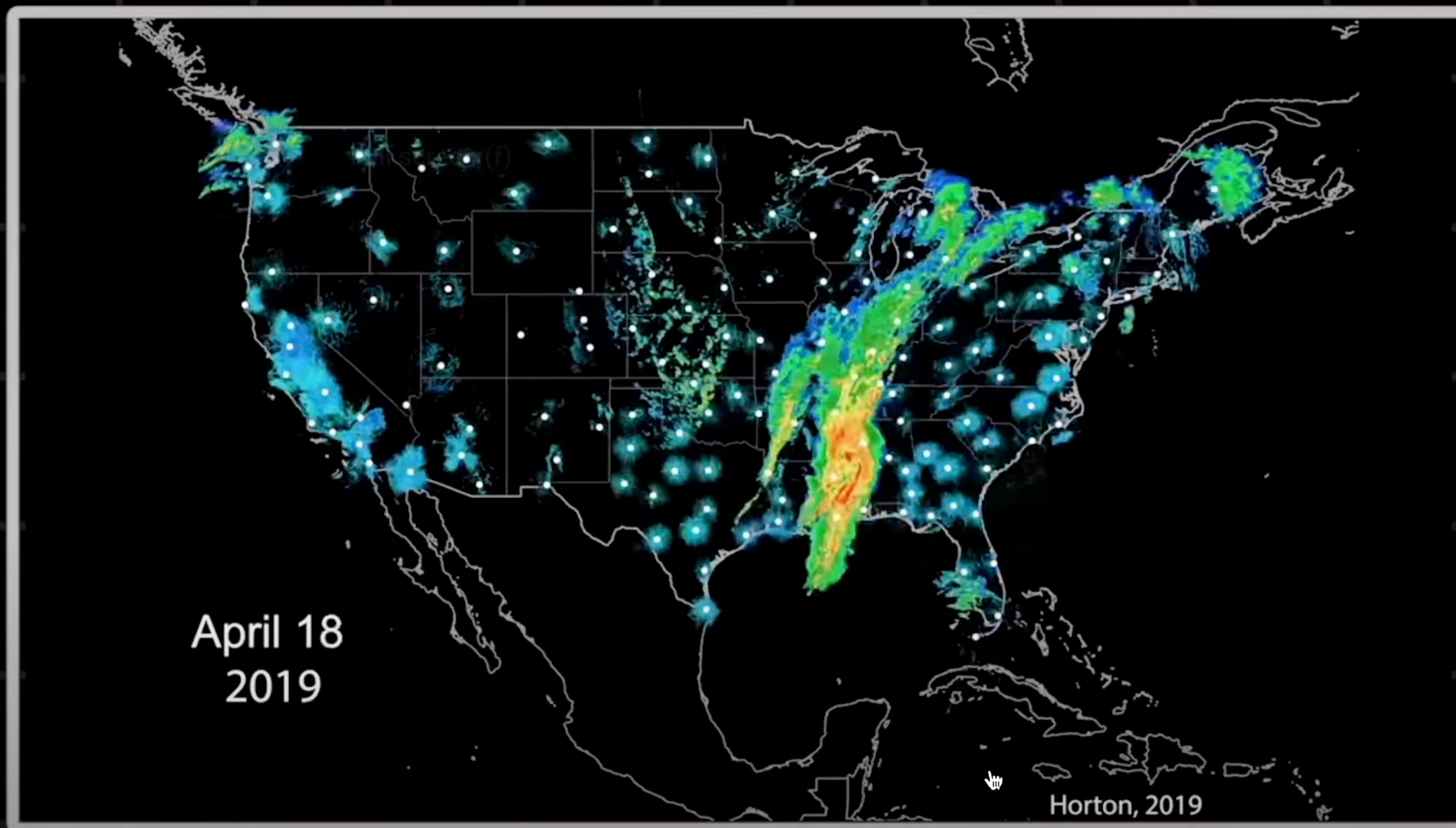
Open Science is Accessible, Reproducible & Inclusive

Creates research that is:

- Cited more
- Creates a bigger impact
- Increases transparency
- Generates more scholarly collaborations

Inclusive science means more:

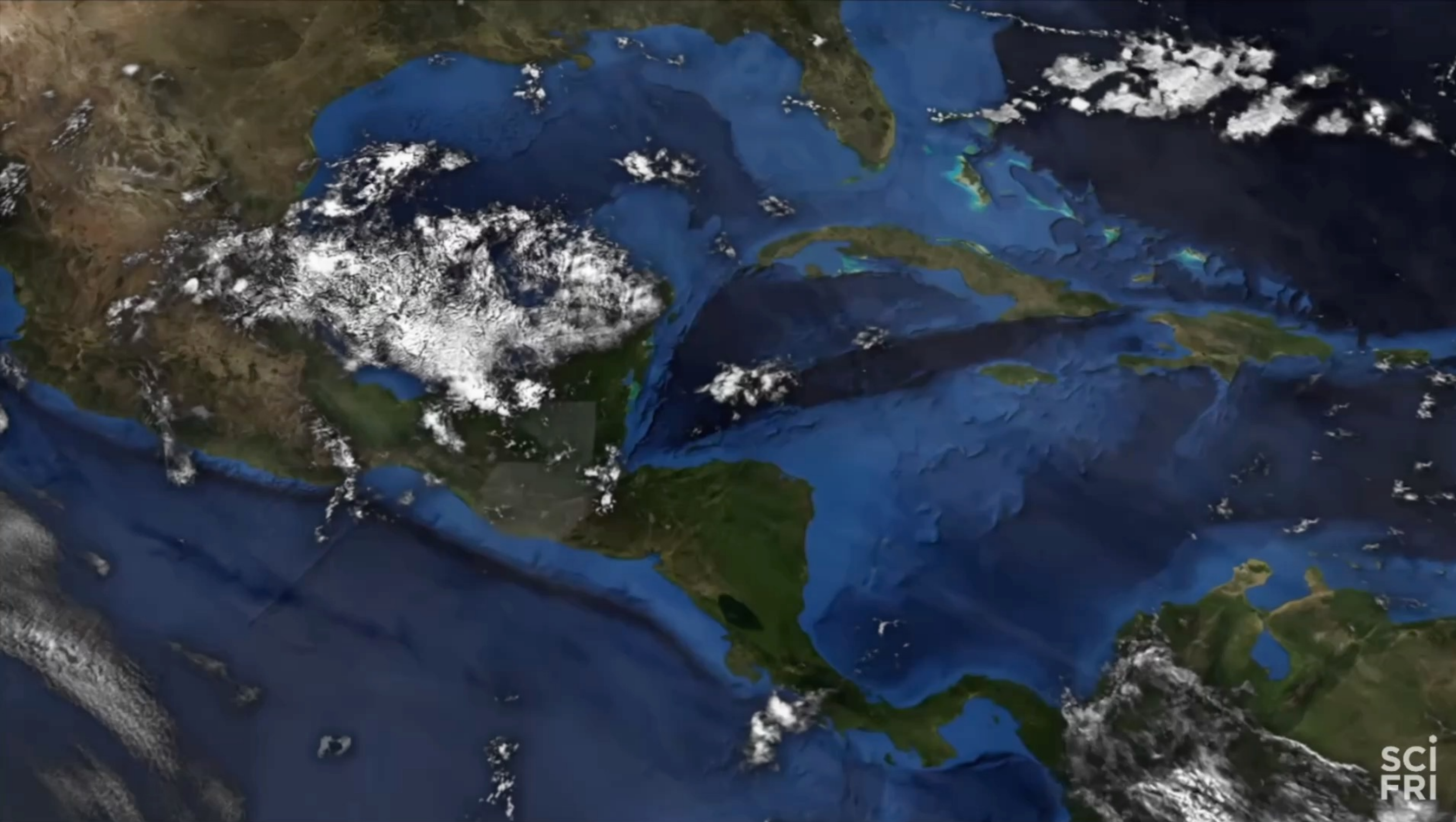
- Collaborative projects
- Access to 'hidden knowledge'
- Equitable Systems
- Participation



Representation

Birds are responding to droughts, climate change, environmental change, and seasonal queues



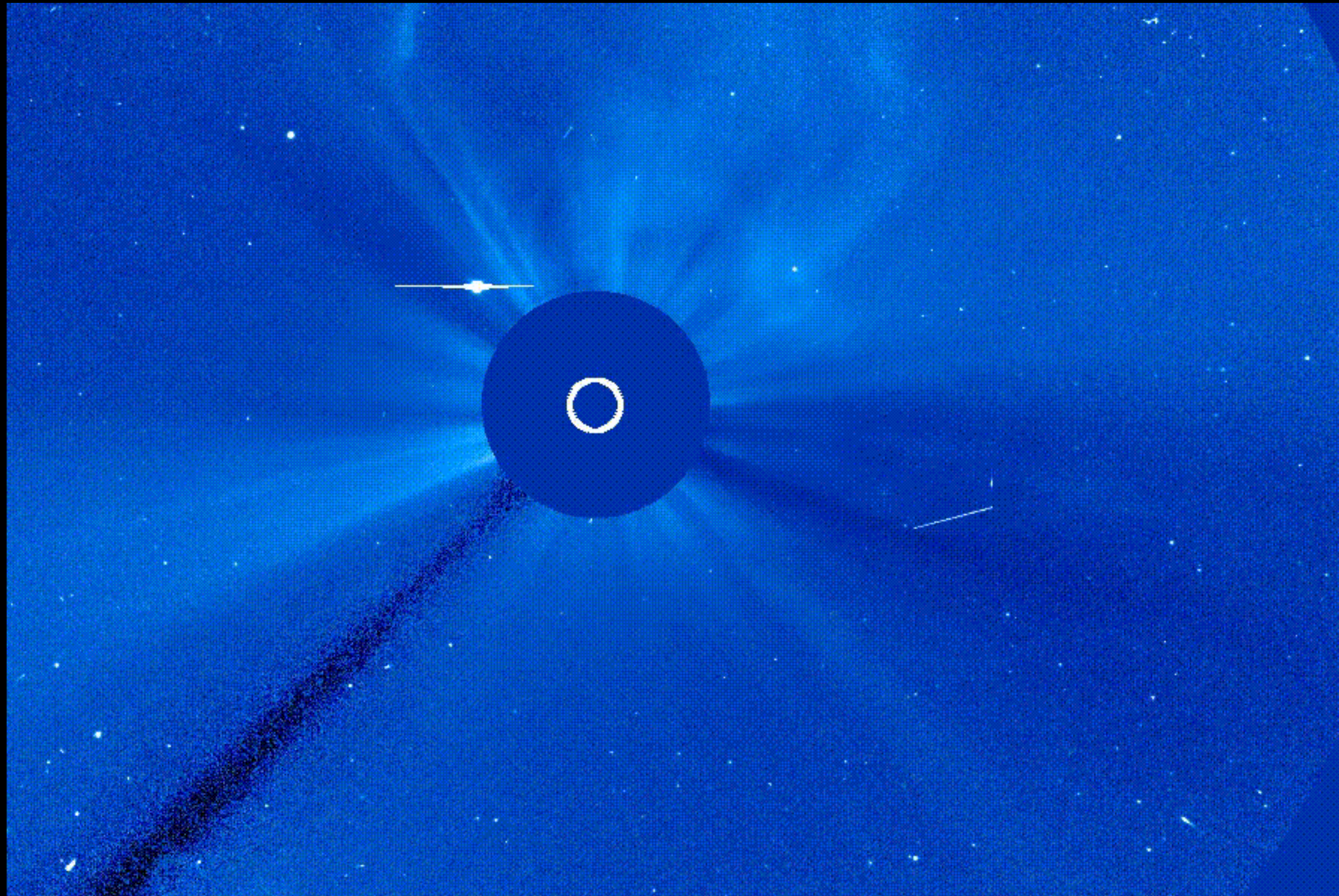


SCI
FRI

Learn by doing transparent, replicable, and understandable science
through community driven science

Africa Flores-Anderson Lake Atitlán Guatemala

The Sungrazer Project was *formalized and organized* by scientists, but was *created* by citizen scientists exploring open science data



4,600 new comets found in SOHO data

130 new comets found in STEREO data

First comet discovered in Parker Solar Probe data (Peter Berrett, Nov. '22)

NASA is looking ahead at really big challenges



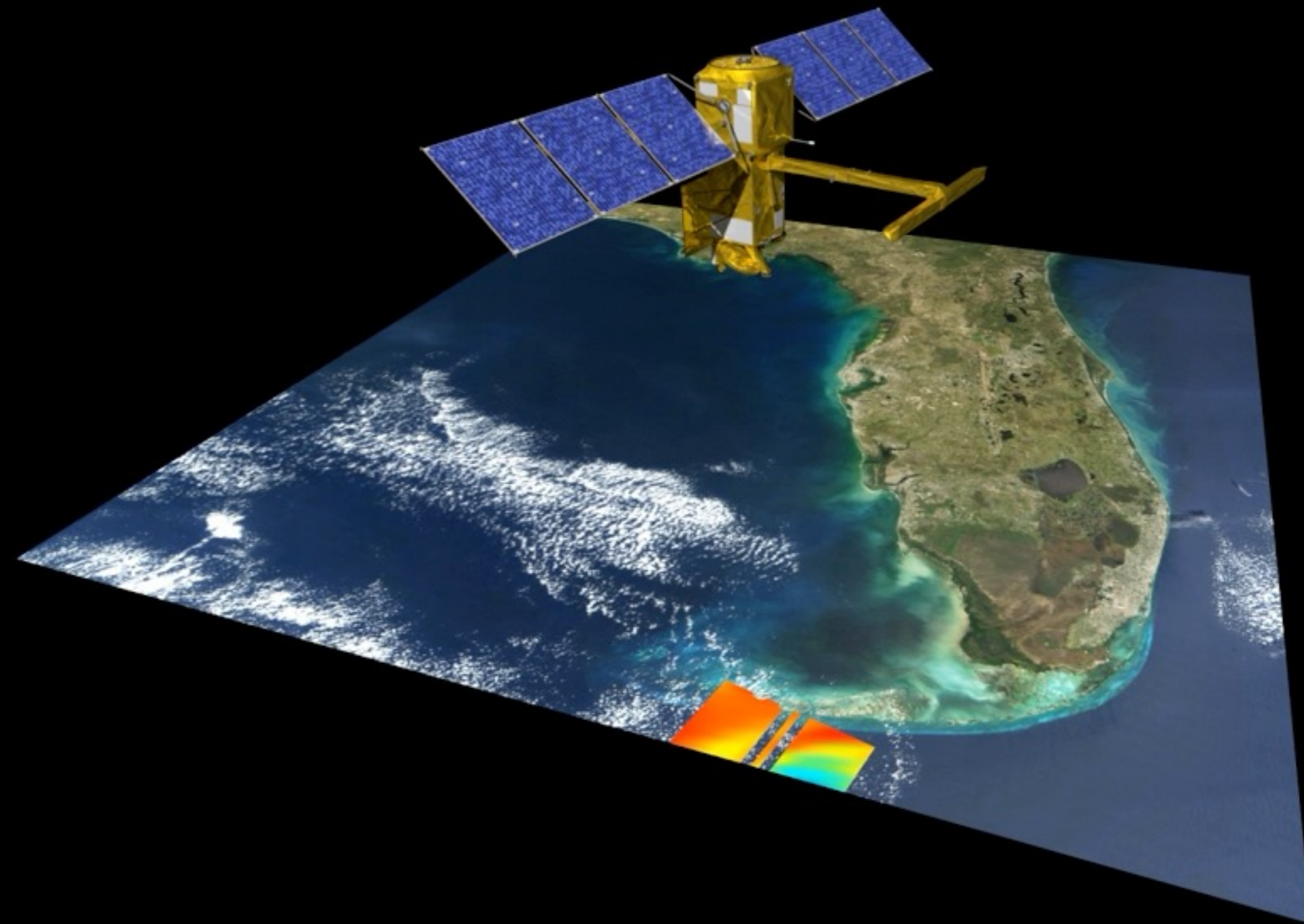
These observations of the aftermath of the crash show that DART was a resounding success.

We need *more* WE science rather than ME science¹ – openly sharing data, software, & results

- Harlan Krumholz, Yale School of Medicine
at 2022 CZI meeting



We need *more* people - more hands, more eyes, more brains - with diverse experiences to participate so that we ask the best questions and find the best solutions



Join Us As NASA Embarks on the Year of Open Science



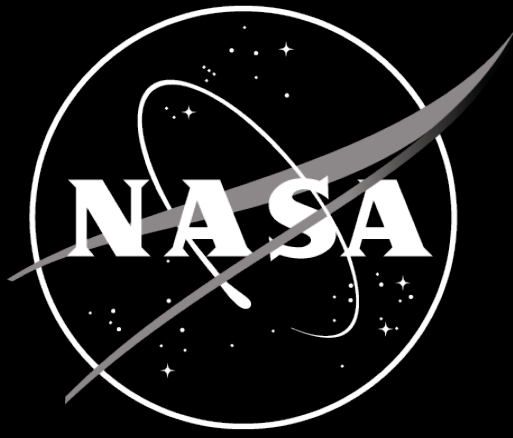
The Year of Open Science is the spark to ignite the cultural shift towards collaborative, inclusive, and open science.

Strategic Goals:

- Create a strategic plan for open science
- Improve the transparency, integrity, and equity of reviews
- Account for open science activities in evaluation criteria
- Remove barriers to participation in science

See the Year of Open Science Cookbook for more ideas.





National Aeronautics and
Space Administration

We need YOU!

TOPS Website



UNLOCKING
THE SECRETS

